



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/527,138

03/08/2005

Friedrich Ackermann

WP21387 US

9514

23690 7590 11/21/2007  
ROCHE DIAGNOSTICS OPERATIONS INC.  
9115 Hague Road  
Indianapolis, IN 46250-0457

EXAMINER
----------

RUTKOWSKI, JEFFREY M

ART UNIT	PAPER NUMBER
----------	--------------

2619

MAIL DATE	DELIVERY MODE
-----------	---------------

11/21/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/527,138

Applicant(s)

ACKERMANN ET AL.

Examiner

Jeffrey M. Rutkowski

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 17-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 March 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 03/08/2005
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

**Claims 1-16** have been cancelled.

#### ***Priority***

1. Receipt is acknowledged of papers filed under 35 U.S.C. 119 (a)-(d) based on an application filed in Germany on 09/14/2002.

#### ***Information Disclosure Statement***

2. The information disclosure statement filed 03/08/2005 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

#### ***Drawings***

3. Figure 3 is objected to under 37 CFR 1.83(a) because it fails to show the communication protocol as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be

Art Unit: 2619

removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Specification*

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: the star-topology recited in **claim 19** is only disclosed in the Summary of the Invention, not in the Detailed Description.
5. The disclosure is objected to because of the following informalities: the use of acronyms such as CAN [0013] is not defined in the specification.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 2619

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. **Claims 17-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Ee et al. (US Pat 6,848,104), hereinafter referred to as Van Ee in view of Dorfe et al. (US Pat 5,204,669), hereinafter referred to as Dorfe, Croslin et al. (US Pat 5,737,319), hereinafter referred to as Croslin and La Croix (US Pat 7,216,090).

9. For **claims 17, 20-22**, Van Ee teaches a discovery subsystem. The discovery subsystem discovers the availability and communication capability of environmental devices. The discovery subsystem can be used to control and/or monitor an associated device's power consumption. Discovery subsystem functions can be invoked through polling mechanisms or in response to a triggered event [col. 18 lines 35-58]. Van Ee does not disclose what is included in a triggered event. La Croix expands on the teachings of Van Ee by disclosing a triggered event includes the turning on and/or off of a device [col. 14 lines 50-55] (claim 17: interrupting a contact of a module to the central unit; restoring the interrupted contact; claim 21: wherein the contact between a module and the central unit is interrupted or restored by interrupting or restoring a communication line; claim 22: wherein the contact between a module and the central unit is interrupted or restored by interrupting or restoring the power supply). It would have been

Art Unit: 2619

obvious to a person of ordinary skill in the art at the time of the invention to use an on/off power event as a trigger in Van Ee's invention since the change in power consumption would trigger the discovery subsystem to determine a new topology. Van Ee teaches environmental devices in an active environment can also become "not discovered" [col. 18 lines 58-63] (comparing the data that were transmitted before the contact was interrupted with the data that were transmitted after interruption of the contact and determining the topology of the modular analytical system on the basis of the comparison, wherein the method steps c to e are repeated with at least one other module until sufficient information is available from the comparison to calculate the topology ). Van Ee does not teach contacting of daisy chained data storing modules. Dorfe teaches the contacting data storing modules limitation absent from the teachings of Van Ee by disclosing at least one peripheral communicates with a programmable controller to receive an address assignment (contacting several modules which store data in a memory with a central unit) via daisy chained control lines 18 [col. 5 lines 15-20, 50-60 and figure 1] (claim 17: wherein at least two modules are connected in series; claim 20: wherein the contacting between a module and the central unit has a linear topology). It would have been obvious to a person of ordinary skill in the art at the time of the invention to contact daisy chained data storing modules in Van Ee's invention to allow the discovery module to create an accurate topology by gathering information from all devices in an active environment. Van Ee does not teach the transmittal of stored information to a central unit. Croslin teaches the transmittal of stored information absent from the teachings of Van Ee by disclosing network elements that report state information to an audit device [col. 8 lines 17-22] (transmitting the stored data of the modules that are directly or indirectly contacted with the central unit to the central unit; transmitting the stored data of the

Art Unit: 2619

modules to the central unit). It would have been obvious to a person of ordinary skill in the art at the time of the invention to transmit device information to a central unit in Van Ee's invention as a way to notify a user of a fault in a particular device.

10. For **claim 18**, which depends from **claim 17**, Van Ee teaches devices implementing the discovery subsystem include devices that have the ability to store information for archival retrieval [col. 8 lines 25-30] (wherein the data are stored in a permanent memory).

11. **Claim 19** is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Ee in view of Dorfe, Croslin and La Croix as applied to **claim 17** above, and further in view of Koelzir (US Pg Pub 2004/012249).

12. For **claim 19**, which depends from **claim 17**, the combination of Van Ee, Dorfe, Croslin and La Croix do not disclose the use of a star topology. Koelzir teaches the star topology limitation absent from the teachings of Van Ee, Dorfe, Croslin and La Croix by disclosing a Controller Area Network (CAN) arranged in a star topology [0069] (wherein the contacting between several modules and the central unit has a star-shaped topology and the central unit can discriminate between the arms of the star by specifically interrupting the contacts to the individual arms). It would have been obvious to a person of ordinary skill in the art at the time of the invention to use a star topology in Van Ee's invention since a single device is used to collect network information.

13. **Claims 23-24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Ee in view of Dorfe, Croslin and La Croix as applied to **claim 17** above, and further in view of Kodosky et al. (US Pat 7,062,718), hereinafter referred to as Kodosky.

14. For **claims 23 and 24**, which depend from **claims 17 and 23** respectively, Van Ee teaches information gathered from the environmental devices is grouped (clustered) according to functional elements to be access by a user **[abstract]**. Van Ee does not teach the topology is displayed graphically. Kodosky teaches the graphical display of topological information absent from the teachings of Van Ee by disclosing a hierarchical system view **[figure 16]** with device and program icons accessed by a user allowing the user to configure and/or manage distributed systems **[abstract]** (claim 23: wherein the topology of the analytical system is displayed graphically on a screen; claim 24: wherein operating instructions are communicated to the user which on the screen are graphically allocated to a module). It would have been obvious to a person of ordinary skill in the art at the time of the invention to use a topological graphical display in Van Ee's invention to allow a user to make sure any changes needed to be made are being made to the correct device.

15. **Claims 25 and 28-31** are rejected under 35 U.S.C. 103(a) as being unpatentable over Dorfe in view of Van Ee.

16. For **claim 25**, Dorfe teaches at least one peripheral communicates with a programmable controller unit (central unit) to receive an address assignment via daisy chained control lines **18 [col. 5 lines 15-20, 50-60 and figure 1]** (a central unit which is contacted with several modules, wherein at least two of the modules are connected in series and the modules each comprise a memory to store data). The control signals are transmitted over the control lines when an address needs to be assigned to a function module **16 [col. 6 lines 15-25]** (a switch which can be controlled by a computer unit in such a manner that the contact of a module to the central unit can be interrupted and restored again, wherein the computer unit comprises). The programmable



Art Unit: 2619

controller unit **12** comprises a programmable controller (control unit to control the switch) **[figure 2]**. The controller uses information transported from the last function module to determine the address and the number of connected function modules **[col. 7 lines 30-34]** (a memory to register the data of the modules). Dorfe does not teach the calculation of topology information. Van Ee teaches the topology calculation absent from the teachings of Dorfe by disclosing environmental devices in an active environment can also become "not discovered" **[col. 18 lines 58-63]** (a computing unit to calculate the topology of the analytical system on the basis of a comparison of data that were registered before interrupting a contact between the central unit and a module with data that were registered after interruption of the contact). It would have been obvious to a person of ordinary skill in the art at the time of the invention to calculate topology information in Dorfe's invention to determine if a node had faulted.

17. For **claim 28**, which depends from **claim 25**, Dorfe does not teach the use of type names. Van Ee discloses the use of type names absent from the teachings of Dorfe by disclosing devices discovered on a network can be identified by name (i.e. TV, VCR) **[figure 4]** (wherein the data comprise a type name to identify a module). It would have been obvious to a person of ordinary skill in the art at the time of the invention to use type names in Dorfe's invention to make the system more "user friendly".

18. For **claims 29 and 31**, which depend from **claims 25 and 30 respectively**, Dorfe teaches the program controller unit and the function modules are connected via lines **[figure 1]** (wherein the contact between a module and the central unit is via a line).

Art Unit: 2619

19. For **claim 30**, which depends from **claim 29**, Dorfe teaches the programmable modules and the programmable controller are electrically interconnected [**col. 5 lines 32-35**] (wherein the modules are supplied with power from the central unit via a line).

20. **Claim 26** is rejected under 35 U.S.C. 103(a) as being unpatentable over Dorfe in view of Van Ee as applied to **claim 25** above, and further in view of Koelzir.

21. For **claim 26**, which depends from **claim 25**, the combination of Dorfe and Van Ee do not disclose the use of a Controller Area Network (CAN). Koelzir teaches the CAN limitation absent from the teachings of Dorfe and Van Ee disclosing a Controller Area Network (CAN) arranged in a star topology [**0069**] (further comprising a CAN-bus). It would have been obvious to a person of ordinary skill in the art at the time of the invention to use a CAN bus in Dorfe's invention to allow for arbitration free transmission between nodes.

22. **Claim 27** is rejected under 35 U.S.C. 103(a) as being unpatentable over Dorfe in view of Van Ee as applied to **claim 25** above, and further in view of Kodosky.

23. For **claim 27**, which depends from **claim 25**, the combination of Dorfe and Van Ee do not disclose the use of Transmission Control Protocol over Internet Protocol (TCP/IP). Kodosky teaches the TCP/IP limitation absent from the teachings of Dorfe and Van Ee by disclosing TCP/IP is used between two devices to transfer information [**col. 38 lines 60-65**] (wherein a TCP/IP is used as the protocol). It would have been obvious to a person of ordinary skill in the art at the time of the invention to use TCP/IP as a communication protocol in Dorfe's invention to make use of a well-known standardized communication protocol.

*Conclusion*

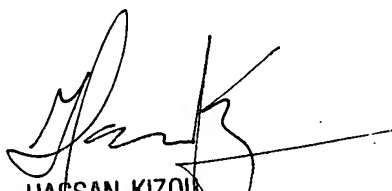
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey M. Rutkowski whose telephone number is (571) 270-1215. The examiner can normally be reached on Monday - Friday 7:30-5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jeffrey M Rutkowski  
Patent Examiner  
11/16/2007

*JMR*

  
HASSAN KIZOU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600